

#	xx/xx/xx	X		X
REV	DATE	REVISION DESCRIPTION	BY	CHK

UNLESS OTHERWISE INDICATED, TOLERANCES:  
X.X = ± 0.025 ANGLES ± 1 DEG.  
X.XX = ± 0.010 FRACTIONS ± 1/64  
X.XXX = ± 0.005

DO NOT SCALE  
BREAK ALL SHARP EDGES  
REPORT ALL ERRORS TO ENGINEERING DEPT.

MATERIAL	NO. REQ'D	DRN. AH	DATE: 8/22/08
	1	CHK. APP.	SCALE: NTS
IGLOO 1631 GENERAL ARRANGEMENT EG&G PROJECT: TOCDF			
NO. 11079-400D Purge Added			REV. 0

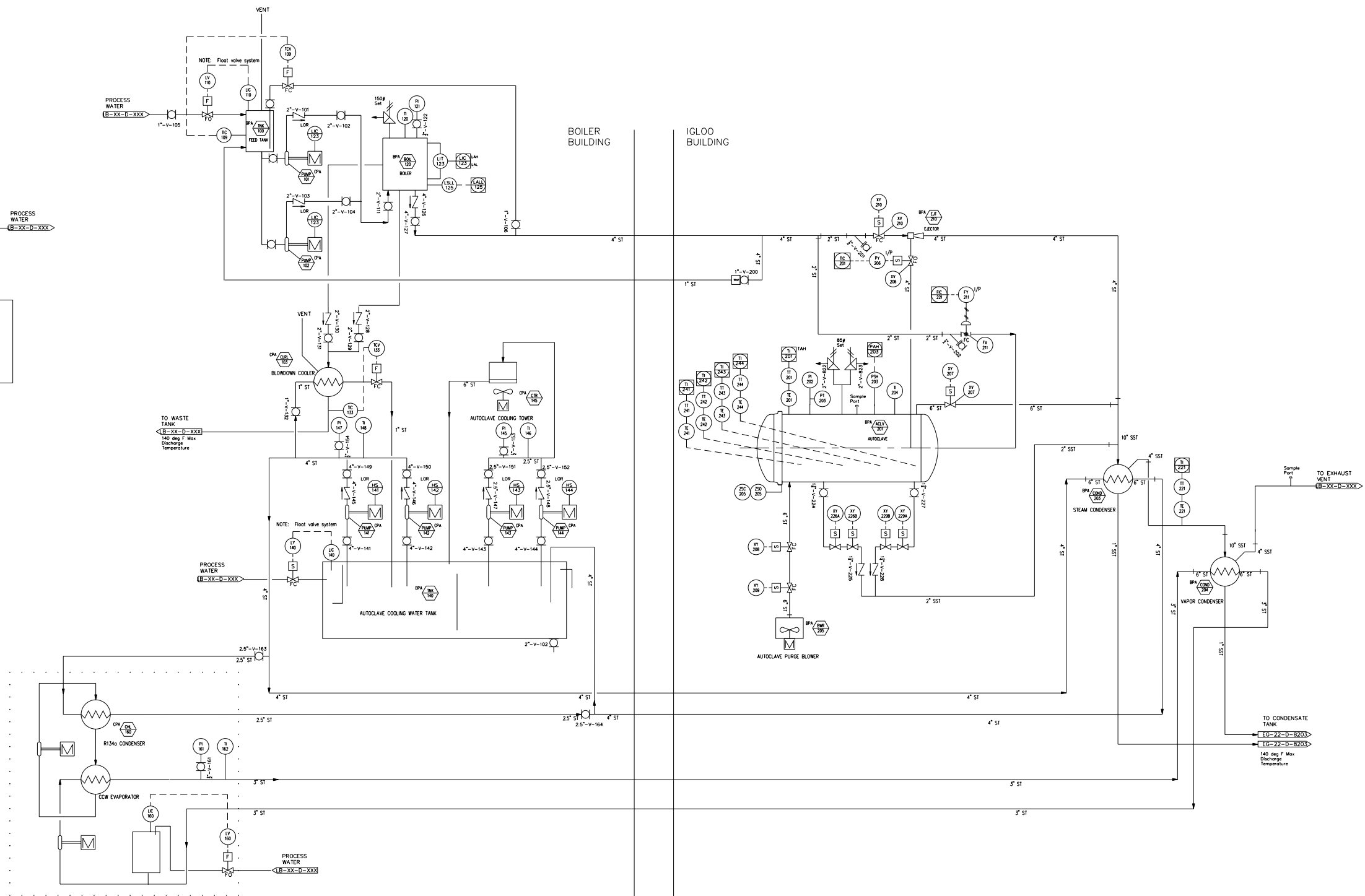
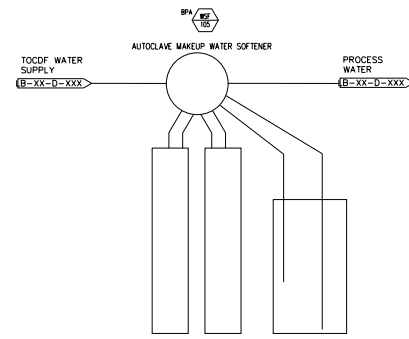
PROPRIETARY DATA NOT TO BE DISCLOSED, USED OR DUPLICATED FOR ANY PURPOSE EXCEPT AS AUTHORIZED IN WRITING BY BONDTECH CORPORATION



**BONDTECH**  
CORPORATION  
2400 N. HWY 27  
SOMERSET, KY  
42503 USA

F  
E  
D  
C  
B  
A

7 6 5 4 3 2 1



- FEED TANK 125BHP  
150 PSI STEAM HEATED  
DUAL FEED PUMP  
CONDENSATE RECOVERY
- BLOWDOWN TANK/COOLER  
150 PSI STEAM HEATED  
FLASH TANK WITH THERMOSTATIC  
CONDENSATE COOLER
- BOILER 125BHP LOW NOX  
NATURAL GAS FIRED  
3.2MMBTU/hr Burner  
150 PSI ASME Design
- COOLING WATER TANK  
1000 GALLON STORAGE  
DUAL REDUNDANT PUMP SYSTEM  
AUTOMATIC OPERATION
- COOLING TOWER 80 TON RATING  
DRY SWAMP OPERATION  
AUTOMATIC FAN OPERATION  
COOLANT RECOVERY TO BASIN
- PROCESS WATER CHILLER  
25 TON CAPACITY  
INTERNAL RETROGRADATION  
INTERNAL PROCESS PUMP
- BONDTECH BITECH AUTOCLAVE  
85 PSI GP PRESSURE  
HYDRAULIC DOOR AND LOCK RING  
AUTOMATIC PROCESS OPERATION  
LIFT TABLE AND INTERNAL CONVEYOR
- SUPERHEATED STEAM CONDENSER  
150 PSI ASME DESIGN  
316 STAINLESS STEEL CONSTRUCTION  
SHELL AND TUBE  
4.2MMBTU/HR
- SATURATED VAPOR CONDENSER  
150 PSI ASME DESIGN  
316 STAINLESS STEEL CONSTRUCTION  
SHELL AND TUBE  
0.2MMBTU/HR
- PURGE AIR BLOWER  
30 HP TURBO BLOWER  
INTEGRATED PLC AND VFD FOR  
MULTIMODE COMPRESSOR CONTROL  
EST PERFORMANCE SAT CFM @ 15 PSI
- SATURATED STEAM EJECTOR  
150 PSI ASME NOZZLE DESIGN  
CAST STEEL CONSTRUCTION

#	xx/xx/xx	X		X
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BONDTECH CORPORATION

2400 N. HWY 27  
SOMERSET, KY  
42503 USA

DRN. RSL

CHK.

APP.

DATE: 10/2/08

SCALE: NTS

TOCDF SYSTEM P&ID

EG&G PROJECT: TOCDF

NO. 11079-4050

REV. 0

MATERIAL

NO. REQ'D

1

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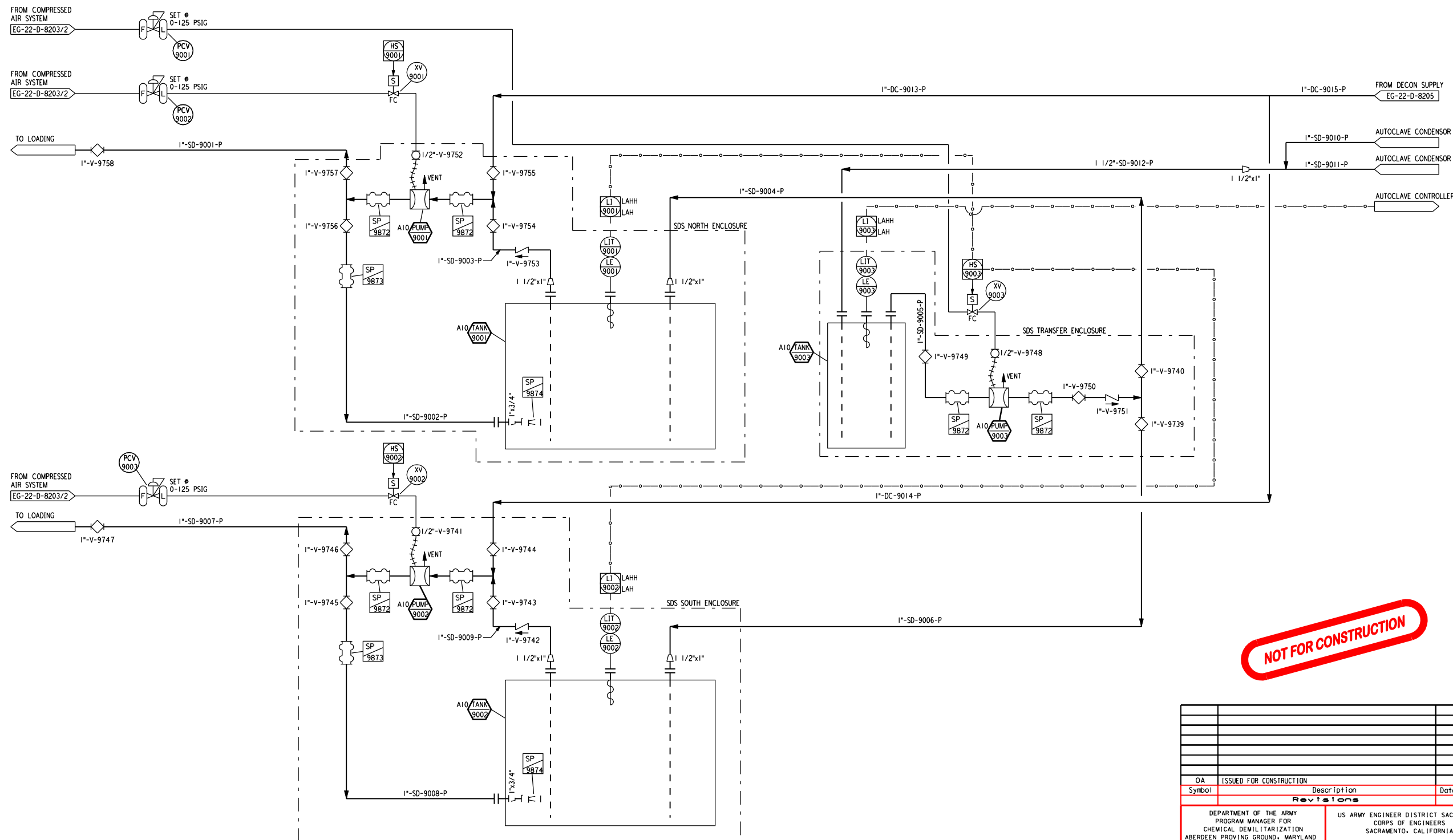
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2 UNCONTROLLED COPY - UNLESS STAMPED OTHERWISE BY DCC<sup>1</sup>



DRAWING STATUS									
NO.	DATE	REVISION DESCRIPTION	DRAWN	CHK.	INSTR.	PROJ.	LE	PROJ.	D.L.S.C.
0A	10/22/08	ISSUED PER EWO 443656 & ECP 4549	SDN						

## NOTES:

1. ALL INSTRUMENT, VALVES AND EQUIPMENT TAG NUMBERS ARE PREFIXED WITH A10-.



NOT FOR CONSTRUCTION

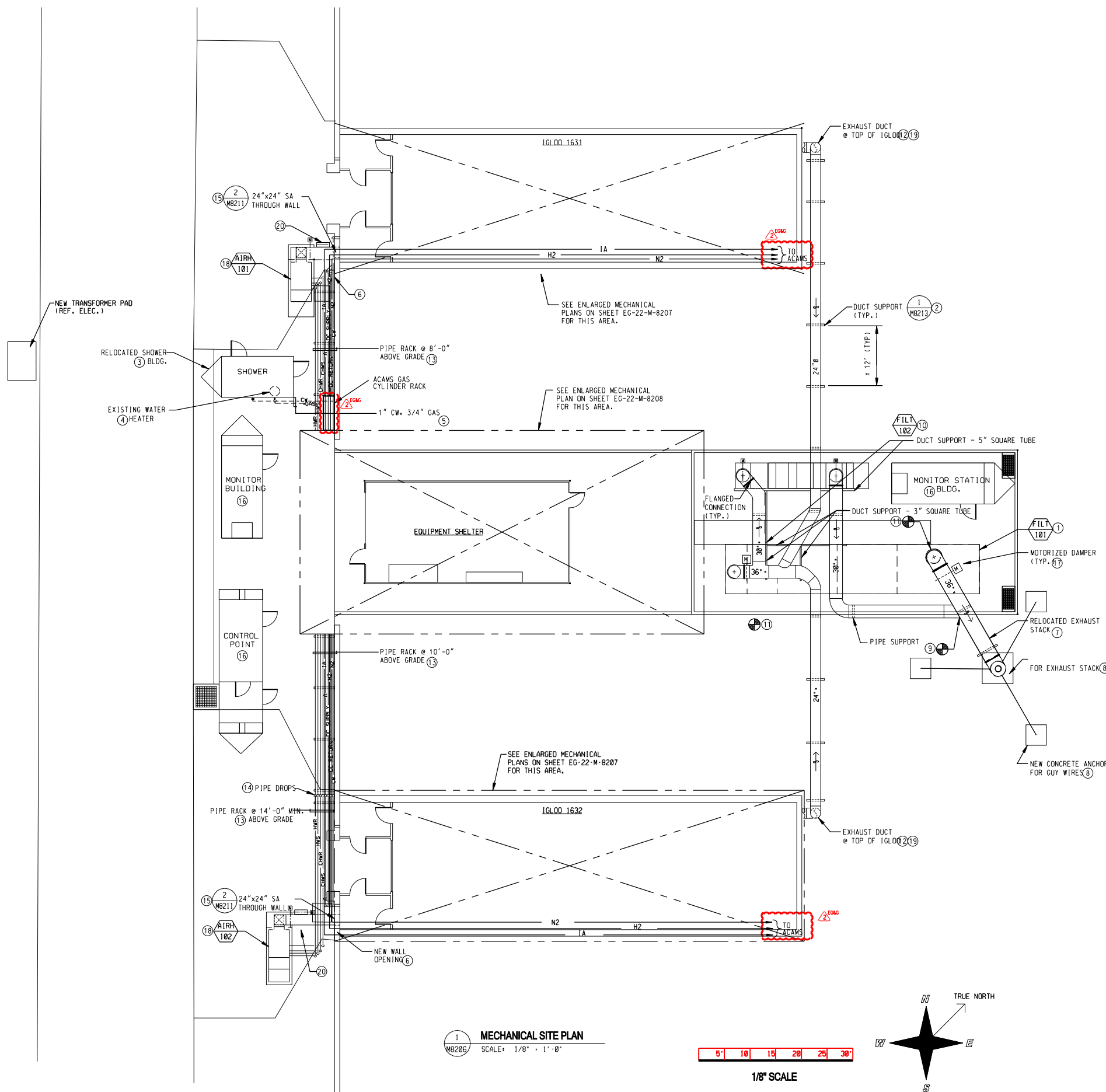
OA	ISSUED FOR CONSTRUCTION		
Symbol	Description	Date	Approved
Revisions			
DEPARTMENT OF THE ARMY PROGRAM MANAGER FOR CHEMICAL DEMILITARIZATION ABERDEEN PROVING GROUND, MARYLAND		US ARMY ENGINEER DISTRICT SACRAMENTO CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA	
 <b>EG&amp;G</b> A Division of URS		 US Army Corps of Engineers	
		TOOELE ARMY DEPOT TOOELE, UTAH	
CHEMICAL STOCKPILE DISPOSAL PROGRAM OFFSITE			
AREA 10 IGL00 1631 AUTOCLAVE SPENT DECON SYSTEM P&ID			
Drawn by: SD NICHOLS	Date: 10/22/08	Scale: NO SCALE	Sheet reference number: EG-22-D-8208
Checked by: EG&G Approved:	PMCD Mgr. Concur: N/A	EG&G Contract No. DAC87-89-C-0076	Rev. 0A
Engineer:		Sheet 1 of 1	

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DRAWING STATUS											
NO.	DATE	REVISION DESCRIPTION	DRAWN	CHK.	APP.	ENGR.	DES.	PROJ.	QA/QC	STATUS	DATE
00	7/6/04	ISSUED FOR REVIEW	AD	DS						MON	STG
0b	8/9/04	ISSUED FOR REVIEW	AD	DS						MON	STG
0c	9/17/04	ISSUED FOR REVIEW	AD	DS						MON	STG
0d	10/25/04	ISSUED FOR REVIEW	AD	DS						MON	STG
1A	11/10/04	ISSUED FOR CONSTRUCTION	AD	DS						MON	STG
1B	3/27/06	REVISED AS BUILT	CWC	CDP						MSD	BAT
2	10/20/06	REVISED PER EMD 225126 & AREA 10	DLP								

SHEET NOTES:

- REFER TO SHT. EG-22-M-8201 & EG-22-M-8202 FOR GENERAL NOTES.
- REFER TO SHEET EG-22-C-8201 & EG-22-C-8202 FOR CONTINUATION OF SITE UTILITIES (GAS & WATER).
- ALL EXHAUST DUCTWORK FROM THE IGL00S TO THE AIR FILTRATION UNITS SHALL BE FRP. ALL DISCHARGE DUCTWORK FROM THE AIR FILTRATION UNITS SHALL BE GALVANIZED SHEET METAL.
- ALL EQUIPMENT IDENTIFICATIONS SHALL INCLUDE A10- PREFIX TO THE DESIGNATION NUMBER.

KEYED NOTES:

- AIR FILTRATION UNIT IS RELOCATED EQUIPMENT. THE OWNER SHALL PERFORM A COMPLETE INSPECTION AND OPERATIONAL TEST PRIOR TO DISCONNECTING AND RELOCATING THIS UNIT. ALL TEST RESULTS SHALL BE RECORDED IN FORMAL TEST AND AIR BALANCE REPORT (TAB) AT A MINIMUM. TESTS SHALL INCLUDE MOTOR DATA, AMPERAGE DRAW, AIRFLOW, AND PRESSURE DROPS. REFER TO OTHER PLANS FOR RELOCATION REQUIREMENTS AND LOCATION. REFER TO SHEET EG-22-M-8205 FOR DETAILED INFORMATION.
- REFER TO DETAIL • 1 ON M8213 SHEET.
- SHOWER BUILDING IS RELOCATED EQUIPMENT. REFER TO OTHER PLANS FOR RELOCATION REQUIREMENTS AND LOCATION.
- THE EXISTING PROPANE WATER HEATER IS A VANGUARD MODEL •GE711, 34 MBH (INPUT), 40 GALLON CAPACITY. REPLACE THE HEATER'S ORIFICE WITH AN ORIFICE SIZED FOR LOWPRESSURE NATURAL GAS. REPLACE ALL BRASS FITTINGS WITH 316 STAINLESS STEEL AND WATER PIPING WITH COPPER WITHIN WATER HEATER CABINET. DISCONNECT AND REMOVE PROPANE GAS PIPING. REF NOTE •5 FOR NEW GAS PIPING.
- ROUTE 1" CW & 3/4" MPG ABOVE GROUND. PROVIDE SHUT-OFF VALVE ON CW LINE @ BUILDING. PROVIDE GAS COCK AND GAS PRESSURE REGULATOR @ BUILDING. CONNECT CW TO EXISTING INLET AS INDICATED IN PHOTO •8/ SHEET EG-22-M-8221. CONNECT NEW GAS LINE TO EXISTING HEATER CONNECTION.
- ROUTE DECON SOLUTION SUPPLY, DECON SOLUTION RETURN, COMPRESSED AIR AND WATER PIPING DOWN WALL AND THROUGH NEW OPENING. CAULK OPENING WITH NON-SHRINK SEALANT.
- EXHAUST STACK IS RELOCATED EQUIPMENT. REFER TO OTHER PLANS FOR RELOCATION REQUIREMENTS AND LOCATION. INCLUDE GUY WIRES COLLAR AND FLANGED INLET IN RELOCATION.
- PROVIDE THREE NEW CONCRETE PIERS FOR GUY WIRE ANCHORS AND A CONCRETE PAD FOR THE EXHAUST STACK SUPPORT. REFER TO STRUCTURAL FOR DETAILS.
- CONNECT NEW 36" EXHAUST DUCT TO EXISTING 36" FLANGED INLET AT RELOCATED EXHAUST STACK.
- ANCHOR NEW BACK-UP AIR FILTRATION UNIT TO CONCRETE PAD. REFER TO SCHEDULE ON SHT. EG-22-M-8205 FOR DETAILED INFORMATION.
- CONNECT NEW 36" VENTILATION DUCT TO EXISTING OPENING @ RELOCATED AIR FILTRATION UNIT. SALVAGE EXISTING DAMPER & DISCONNECT AIR LINE. DAMPER WILL BE USED FOR MANUAL SHUT-OFF ONLY.
- ROUTE NEW EXHAUST DUCT DOWN TO AN ELEVATION OF 9'-3" @ NEW IGL00 WALL OPENING. PROVIDE SMOOTH RADIUS ELBOWS. REFER SHEET M-8207 FOR CONTINUATION.
- USE PIPE RACK FOR CHILLED WATER, HEATING HOT WATER, COMPRESSED AIR DECON SOLUTION SUPPLY/RETURN, POTABLE WATER, GAS AND ELECTRICAL CONDUITS.
- ROUTE PIPES @ 14'-0" ABOVE GRADE FROM THIS POINT SOUTH. ROUTE PIPES @ 15'-0" ABOVE GRADE TO THE NORTH.
- PROVIDE NEW 24"x24" WALL OPENING @ 8'-0" ABOVE SLAB FOR NEW SUPPLY DUCT. COORDINATE LOCATION WITH INTERIOR CEILING ELEVATION. REFER TO STRUCTURAL PLANS FOR DETAIL.
- THE PACKAGED HVAC SYSTEM FOR THIS BUILDING SHALL BE PROVIDED BY THE BUILDING MANUFACTURER. REFER TO OTHER PLANS FOR INFORMATION.
- DAMPERS SHALL BE OF SAME MATERIAL AS DUCTWORK MATERIAL. REFER TO CONTROLS PLAN FOR SEQUENCE OF OPERATION.
- SECURE AIR HANDLING UNIT TO SLAB.
- RESTORE GRADING TO MATCH EXISTING.
- 36"x18" N.C. MAKE-UP AIR OPENING WITH MOTORIZED DAMPER. DAMPER SHALL OPEN UPON FAILURE OF AIR-HANDLING UNIT TO PROVIDE MAKE-UP AIR SUPPLY TO IGL00.

0a	ISSUED FOR REVIEW	7/6/04	MON
0b	ISSUED FOR REVIEW	8/9/04	MON
0c	ISSUED FOR REVIEW	9/17/04	MON
0d	ISSUED FOR REVIEW	10/25/04	MON
1A	ISSUED FOR CONSTRUCTION	11/10/04	MON
1B	REVISED AS BUILT	3/27/06	MSD
2	REVISED AS BUILT		

Symbol

Description

Date

Approved

DEPARTMENT OF THE ARMY  
PROGRAM MANAGER FOR  
CHEMICAL DEMILITARIZATION  
ABERDEEN PROVING GROUND, MARYLAND

US ARMY ENGINEER DISTRICT SACRAMENTO  
CORPS OF ENGINEERS  
SACRAMENTO, CALIFORNIA

EG&G  
A Division of CH2M

US Army Corps  
of Engineers

TOOELE ARMY DEPOT  
TOOELE, UTAH

Drawn by:  
AFD

Date:

Checked by:  
DB

EG&G Approved:

Engineer:  
DS

PMCD Mgr., Concur:

Scale:  
1/8"=1'-0"

Sheet reference  
number:  
EG-22-M-8206

EG&G Contract No.  
DACA87-89-C-0076

Sheet  
1 of 1

Rev.  
2

MECHANICAL SITE PLAN  
SCALE: 1/8" = 1'-0"

1/8" SCALE

